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ATTACHMENT A

STATEMENT OF WORK

THIS DOCUMENT IS SEPARATELY POSTED.

ATTACHMENT B
MINIMUM QUALIFICATIONS FOR PERSONNEL

LABORATORY MANAGER (Key Personnel)

Duties: Responsible for overall aspects of laboratory performance.

Qualifications: Minimum of Bachelor's Degree in chemistry or scientific/engineering discipline and six (6) years of environmental laboratory management.

PROJECT MANAGER (Key Personnel)

Duties: Responsible for overall aspects of EPA contract, acts as the primary contact for EPA. Responsible for assuring that all work meets the technical objectives of the contract and is performed within the EPA approved schedule and budget. Responsible for developing and implementing a plan to perform sample preparation and/or analysis for the labor hour component samples. Responsible for supervision of the personnel required to perform the labor hour component projects. Responsible for review of the final data package/report.

Qualifications: Minimum of two (2) years of project management, and six (6) years of environmental organic analytical laboratory experience. Minimum of Bachelor's Degree in chemistry.

QUALITY ASSURANCE OFFICER (Key Personnel)

Duties: Responsible for overseeing the quality assurance aspects of the data and reporting to meet all terms and conditions of the EPA contract. QA Officer must report directly to corporate management.

Qualifications: Minimum four (4) years of environmental analytical laboratory experience, including minimum of one (1) year experience in a quality assurance function and three (3) years of organic environmental laboratory analysis. Minimum of Bachelor's Degree in chemistry or scientific/engineering discipline.

GC/MS LABORATORY SUPERVISOR (Key Personnel)

Duties: Responsible for all technical efforts of the GC/MS laboratory to meet all terms and conditions of the EPA contract.

Qualifications: Minimum four (4) years experience operating and maintaining gas chromatograph/mass spectrometer/data systems (GC/MS/DS), including at least one (1) year of supervisory experience. Minimum of a Bachelor's degree in chemistry or scientific/engineering.

GC/MS INTERPRETATION SPECIALIST (Key Personnel)

Duties: Responsible for all technical efforts concerning mass spectral interpretation of reported data to meet all terms and conditions of the EPA contract.

Qualifications: Minimum two (2) years experience in mass spectral interpretation, including training course in mass spectral interpretation, and three (3) years of GC/MS operation. Minimum of Bachelor's Degree in chemistry.

GC LABORATORY SUPERVISOR (Key Personnel)

Duties: Responsible for all technical efforts of the GC laboratory to meet all terms and conditions of the EPA contract. Responsible for supervising GC organics analysis staff in performing the Labor Hour projects sample preparation and/or analysis. This is hands-on position which oversees that the EPA approved preparation and/or analysis method is properly performed and meets the project objectives throughout preparation and analysis.

Qualifications: Minimum three (3) years of experience operating and maintaining gas chromatography/data systems (GC/DS), including at least one (1) year of supervisory experience. Minimum of Bachelor's degree in chemistry or scientific/engineering discipline.

PESTICIDE/PCB ANALYSIS EXPERT (Key Personnel)

Duties: Responsible for all technical efforts concerning chromatographic interpretation of reported pesticide residue to meet all terms and conditions of the EPA contract.

Qualifications: Minimum three (3) years experience operating and maintaining a GC/DS and interpreting GC chromatograms for pesticide/PCB analysis. Minimum of Bachelor's degree in chemistry or scientific/engineering discipline.

SAMPLE PREPARATION LABORATORY SUPERVISOR (Key Personnel)

Duties: Responsible for all technical efforts of the preparation of laboratory to meet all terms and conditions of the EPA contract.

Qualifications: Minimum three (3) years experience in organic sample preparation, including at least one (1) year of supervisory experience. Minimum of Bachelor's Degree in chemistry or scientific/engineering discipline.

PREPARATION LABORATORY CHEMISTS

Duties: Responsible for all technical efforts concerning organic sample preparation to meet all terms and conditions of the EPA contract. (Provide names of at least two (2) qualified individuals on the worksheet.)

Qualifications: Minimum one (1) year experience in Contractor's laboratory extraction/concentration procedures, high school diploma and one (1) college level course in general chemistry or equivalent.

LABORATORY INFORMATION SYSTEMS MANAGER

Duties: Responsible for the management and quality control of all computing systems (hardware, software, documentation and procedures), including: generating, updating and quality control deliverables to meet all terms and conditions of the EPA contract. Systems manager is also responsible for maintaining archives of software.

Qualifications: Minimum three (3) years of system/data management and programming experience, including one (1) year of experience with the software being utilized for data management and generation of laboratory reports. Minimum of Bachelor's Degree in computer science or programming discipline is required; or in lieu of the degree, two (2) years of experience with the software being utilized and four (4) or more courses in programming, information management, database management or systems requirements analysis.

SAMPLE CUSTODIAN AND BACKUP SAMPLE CUSTODIAN

Duties: Responsible for receiving the EPA samples (logging, handling, and storage). Backup is responsible for fulfilling the sample custodian's responsibilities if the primary is not available.

Qualifications: Minimum of High School Diploma and six (6) months of employment with the contractor's laboratory performing sample custodian functions.

DOCUMENT CONTROL OFFICER AND BACK-UP DOCUMENT CONTROL OFFICER

Duties: Responsible for all aspects of data deliverables: organization, packaging, copying, and delivery. Responsible for ensuring that all documents generated are placed in the Complete SDG File for inventory and are delivered to the appropriate EPA Regional personnel and other recipient(s). Backup responsible for fulfilling the document control officer's responsibilities if primary not available.

Qualifications: Minimum of High School Diploma and six (6) months of employment with the contractor's laboratory performing document control functions.

GC/MS OPERATOR

Duties: Responsible for all technical efforts concerning GC/MS operations, data reduction and report generation to meet all terms and conditions of the EPA contract. (Provide the names of three (3) qualified individuals on the worksheet.)

Qualifications: Minimum two (2) years experience in operating and maintaining gas chromatograph/mass spectrometer/data system (GC/MS/DS). Minimum of Bachelor's Degree in chemistry or scientific/engineering discipline.

GC OPERATOR

Duties: Responsible for all technical efforts concerning GC/ECD, GC/FID, and GC/MPD operation, data reduction and report generation to meet all terms and conditions of the EPA contract. (Provide names of three (3) qualified individuals on the worksheet.)

Qualifications: Minimum two (2) years experience operating and maintaining GC/ECD, GC/FID, and GC/NPD. Minimum of Bachelor's Degree in chemistry or scientific/engineering discipline.

ATTACHMENT C
WORK PLAN ELEMENTS

The Contractor must submit a detailed Work Plan for completing the analytical project specified in the Task Order. The Work Plan must include both a Technical Proposal (Analytical Section) and Price Proposal as described below.

PART I - Technical Proposal/Analytical Section

The technical approach for performing the analytical project must be presented in detail and must address the general Work Plan elements 1 through 9 as described below. Existing laboratory Standard Operating Procedures (SOPs) for specific elements may be summarized in the Work Plan, however, the Contractor is responsible for determining the applicability of particular SOPs to the specific requirements of the Scope of Work.

If existing laboratory SOPs for specific elements are summarized in the Work Plan, then the Contractor must provide a complete reference notation (SOP title, date, version, section # and page #) for each applicable SOP. The Contractor must also include each applicable SOP as an attachment to the Work Plan submittal.

1. Method Synopsis and Achievement of Data Quality Objectives

The method synopsis must summarize each step of the proposed analytical method. This summary must include all extraction, clean-up, concentration, and analysis procedures which will be utilized to achieve the Project Data Quality Objectives. The Contractor must provide a detailed discussion of the chemical theory of the proposed method procedures in the Work Plan and must provide literature references to support their proposed procedures as an attachment to the Work Plan.

The method synopsis must include Quality Control (QC) to support the data. The Quality Control requirements must support quantitative and qualitative accuracy of sample data. The Quality Control parameters may include calibration procedures, surrogates, matrix spikes, internal standards, blanks (preparation, clean-up, method, instrument), etc. given the specific extraction, clean-up, concentration, and analysis procedures proposed in the Contractor's work plan.

The method synopsis must propose an alternate procedure to meet the Data Quality Objectives in the event that the initial proposed procedure does not meet the objectives.

The decision tree which will be used by the contractor to identify and resolve unexpected problems with the proposed procedure must be included in the synopsis.

2. Equipment & Supplies

The Contractor must provide all equipment and supplies to be used for the analytical project. A complete list of necessary equipment and supplies to perform this analytical project must be included in the Work Plan.

The Contractor must designate the availability of all necessary equipment and supplies. All necessary equipment and supplies must be available at the onset of the analytical project.

3. Reagents & Standards

The Contractor must provide all reagents and standards to be used for this

analytical project. A complete list of necessary reagents and standards to perform the analytical project must be included in the Work Plan.

The Contractor must designate the availability of all necessary reagents and standards. All necessary reagents and standards must be available at the onset of the analytical project.

4. Holding Times & Preservation Techniques

The Contractor must provide a chart defining all project sample preservation and holding time requirements, which must be achieved by both the field sampler (sample collection and shipment) and laboratory Contractor personnel (sample receipt, preparation and analysis).

The chart must include a list of the number and size/dimension of pre-cleaned sampling containers per parameter per matrix.

5. Calibration & Standardization

The Contractor must provide a detailed description of the analytical project instrument operating conditions and calibration requirements necessary to ensure the accuracy and stability of the analytical method. The following requirements must be included: instrument operating conditions (column temperature, oven temperature, carrier gas flow rate, etc.), instrument performance checks, resolution performance check mixtures, initial calibration standards (components and concentration), continuing calibration standards (components and concentrations), and second source calibration verification procedures, and any other applicable calibration and standardization procedure.

The Contractor must include all calibration and standardization concentration levels, frequencies of analysis, technical acceptance criteria and corrective action procedures in the Work Plan necessary to ensure qualitative and quantitative measurement accuracy.

6. Analytical Procedure

The Contractor must provide a detailed description of the analytical procedure. The sample preparation/extraction, clean-up, concentration and analysis techniques must be specified. The Contractor must include all sample preparation (extraction, clean-up and concentration) and analysis (including surrogate internal standards, if applicable) technical acceptance criteria and corrective action procedures in the Work Plan. The Contractor must identify which technical acceptance criteria will trigger sample re-extraction and/or reanalysis and must include re-extraction and/or re-analysis corrective action procedures in the Work Plan.

7. Data Analysis & Calculations

The Contractor must provide the target compound list, MDLs and the contract required detection/quantitation limits for the analysis. The Contractor must describe the procedures for target compound identification and quantitation, including compound confirmation and equations for sample calculation.

The target compound quantitation and identification technical acceptance criteria and corrective action procedures must be included in the Work Plan.

8. Quality Control

The Contractor must provide a detailed description of the quality control procedures for the analytical procedure. The required quality control procedures

include, but are not limited to, blanks, duplicate samples, PE samples, internal standards, surrogates, and matrix spike samples. The QC concentration levels, frequency, technical acceptance criteria and corrective action procedures must be included in the Work Plan.

9. Reporting Requirements and Data Deliverables

The Contractor must provide a detailed description of the Labor Hour data package deliverable which must meet content and format requirements for Labor Hour data package deliverables as described in Exhibit B of the Statement of Work (Attachment A).

Each Labor Hour data package deliverable must parallel, as closely as possible, the content and format of the data package deliverables as described in Exhibit B of the SOW. All reports and data deliverables must be:

- * Legible,
- * Clearly labeled and completed in accordance with instructions in Exhibit B,
- * Arranged in the order specified in Exhibit B, and
- * Paginated consecutively in ascending order starting from the SDG Narrative using double-sided pages.

The Contractor shall use EPA Case Numbers (including SDG Numbers) and EPA Sample Numbers to identify samples received under this contract, both verbally and in reports, data deliverables and correspondence. The contract number shall be specified in all reports, data deliverables, and correspondence.

The project start and completion dates must also be provided.

PART II - Price Proposal

The Price Proposal of the Work Plan must include the labor hours by labor category and total dollar price which the Contractor proposes will be necessary to complete the project work contained in the Work Plan. The price proposal shall be based on the hourly labor rates agreed to in Clause B.1 of the contract. The time and cost estimate shall be based on an hourly rate per sample and shall include all technical requirements as specified above. The estimate must be broken out into the various phases of the project (for example, Work Plan development, sample preparation, sample analysis). The estimate must provide the hours proposed by labor category within each phase of the project.

ATTACHMENT D
Past Performance Questionnaire
Source Selection Sensitive Information

Name of Offeror: _____

Name of Client Organization: _____

Client Point of Contact: _____ Phone No. _____

Contract Title: _____

Contract Number: _____ Contract Value: _____

Type of Contract: _____ Period of Performance: _____

Description of Services Provided:

The ratings below are supplied by the client identified above, NOT the offeror.

Performance Elements	Not Applicable	Outstanding	Satisfacto ry	Unsatisfacto ry
1. Quality of Data Produced - Data substantiated with QC procedures & documentation				
2. Timeliness of Performance - Resolving Time critical issues & Providing Data				
3. Effectiveness of Management (including subcontractors)				
4. Initiative in Meeting Requirements - Timeliness & Technical Capacity				
5. Response to Technical Direction				
6. Responsiveness to Performance Problems				
7. Compliance with Cost Estimates				
8. Customer Satisfaction				
9. Overall Performance				

10. Remarks on outstanding performance:
(Provide data supporting this observation; you may continue on a separate sheet if needed.)

11. Remarks on unsatisfactory performance:
(Provide data supporting this observation; you may continue on a separate sheet if needed.)

12. Please identify any corporate affiliations with the offeror.

13. Would you hire again?

14. Information provided by:

Name

Mailing Address (Street and P.O. Box)

Title

City, State, and Zip Code

Time of Call

Telephone and Fax Numbers

15. Questionnaire completed by:

Name of EPA Employee

Signature of EPA Employee

Title

Date Questionnaire Completed

ATTACHMENT E

CLIENT AUTHORIZATION LETTER

[Addressee]

Dear "Client":

We are currently responding to the U.S. Environmental Protection Agency (EPA)RFP No. _____ for the procurement of _____. The U.S. EPA is placing an increased emphasis in their acquisitions on past performance as a source selection evaluation factor. EPA requires offerors to inform references identified in proposals that EPA may contact them about past performance information.

If you are contacted by EPA for information on work we have performed under contract for your company/agency/state or local government, you are hereby authorized to respond to EPA inquiries.

Your cooperation is appreciated. Please direct any questions to _____ (offeror's point-of-contact).

Sincerely,

ATTACHMENT F
INVOICE PREPARATION INSTRUCTIONS
SF 1034

The information which a contractor is required to submit in its Standard Form 1034 is set forth as follows:

- (1) **U.S. Department, Bureau, or establishment and location** insert the names and address of the servicing finance office unless the contract specifically provides otherwise.
- (2) **Date Voucher Prepared** - insert date on which the public voucher is prepared and submitted.
- (3) **Contract/Delivery Order Number and Date** - insert the number and date of the contract and delivery order, if applicable, under which reimbursement is claimed.
- (4) **Requisition Number and Date** - leave blank.
- (5) **Voucher Number** - insert the appropriate serial number of the voucher. A separate series of consecutive numbers, beginning with Number 1, shall be used by the contractor for each new contract. When an original voucher was submitted, but not paid in full because of suspended costs, resubmission vouchers should be submitted in a separate invoice showing the original voucher number and designated with the letter "R" as the last character of the number. If there is more than one resubmission, use the appropriate suffix (R2, R3, etc.)
- (6) **Schedule Number; Paid By; Date Invoice Received** - leave blank.
- (7) **Discount Terms** - enter terms of discount, if applicable.
- (8) **Payee's Account Number** - this space may be used by the contractor to record the account or job number(s) assigned to the contract or may be left blank.
- (9) **Payee's Name and Address** - show the name of the contractor exactly as it appears in the contract and its correct address, except when an assignment has been made by the contractor, or the right to receive payment has been restricted, as in the case of an advance account. When the right to receive payment is restricted, the type of information to be shown in this space shall be furnished by the Contracting Officer.
- (10) **Shipped From; To; Weight Government B/L Number** - insert for supply contracts.
- (11) **Date of Delivery or Service** - show the month, day and year, beginning and ending dates of incurrence of costs claimed for reimbursement. Adjustments to costs for prior periods should identify the period applicable to their incurrence, e.g., revised provisional or final indirect cost rates, award fee, etc.
- (12) **Articles and Services** - insert the following: "For detail, see Standard Form 1035 total amount claimed transferred from Page ____ of Standard Form 1035." Type "COST REIMBURSABLE-PROVISIONAL PAYMENT" or "INDEFINITE QUANTITY/INDEFINITE DELIVERY-PROVISIONAL PAYMENT" on the Interim public vouchers. Type "COST REIMBURSABLE-COMPLETION VOUCHER" or "INDEFINITE QUANTITY/INDEFINITE DELIVERY-COMPLETION VOUCHER" on the Completion public voucher. Type "COST REIMBURSABLE-FINAL VOUCHER" or "INDEFINITE QUANTITY/INDEFINITE DELIVERY-FINAL VOUCHER" on the Final public voucher. Type the following certification, signed by an authorized official, on the face of the Standard Form 1034.

"I certify that all payments requested are for appropriate purposes and in accordance with the agreements set forth in the contract."

(Name of Official)

(Title)

- (13) **Quantity; Unit Price** - insert for supply contracts.
- (14) **Amount** - insert the amount claimed for the period indicated in (11) above.

ATTACHMENT G-1

**EXPERIENCE/REFERENCE
WORKSHEETS**

NOTE: These worksheets are to be completed and submitted as part of the written technical proposal, Corporate Experience. Past Performance Questionnaires may also be submitted for the Clients included on these worksheets.

Experience/Reference Worksheet No. 1

Offeror: _____ Date: _____

Reference 1 - SOW, Exhibit D, Analysis

Project Description includes: A Summary of the project, the analytical methods for sample preparation & analysis, number of samples, sample matrix, QA/QC requirements summary, data deliverables summary, total project dollar value/cost and beginning and ending dates for the project.

Client Contact Name: _____ Telephone Number: _____

Client Company or Agency

Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Experience/Reference Worksheet No. 2

Offeror: _____ Date: _____

Reference 2 - SOW, Exhibit D, Analysis

Project Description includes: A Summary of the project, the analytical methods for sample preparation & analysis, number of samples, sample matrix, QA/QC requirements summary, data deliverables summary, total project dollar value/cost and beginning and ending dates for the project.

Client Contact Name: _____ Telephone Number: _____

Client Company or Agency

Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Experience/Reference Worksheet No. 3

Offeror: _____ Date: _____

Reference 3 - SOW, Exhibit D, Analysis

Project Description includes: A Summary of the project, the analytical methods for sample preparation & analysis, number of samples, sample matrix, QA/QC requirements summary, data deliverables summary, total project dollar value/cost and beginning and ending dates for the project.

Client Contact Name: _____ Telephone Number: _____

Client Company or Agency

Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Experience/Reference Worksheet No. 4

Offeror: _____ Date: _____

Reference 1 - Labor Hour Pool (Non-Routine Protocol) Analysis

Project Description includes: A Summary of the project, the analytical methods for sample preparation & analysis, number of samples, sample matrix, QA/QC requirements summary, data deliverables summary, total project dollar value/cost and beginning and ending dates for the project.

Client Contact Name: _____ Telephone Number: _____

Client Company or Agency

Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

ATTACHMENT G-2
CONTRACT DESIGNATED EQUIPMENT SUMMARY

Laboratory _____ Date _____

Offeror shall provide an inventory of available laboratory equipment using the following format.

A. MINIMUM REQUIRED LABORATORY EQUIPMENT INVENTORY

The items of laboratory equipment designated below are the minimum required for contract compliance.

1. Gas Chromatograph/Mass Spectrometer/Data System for Low VOA's -- Minimum 1 Required

Item Description	Manufacturer	Model* "S" or "P"	Software Title & Revision #	Serial No. &/or Lab ID	Date Installed Month/Year
GC/MS					
purge & trap					
Data System					

2. Gas Chromatograph/Mass Spectrometer/Data System for Medium/Low VOA's -- Minimum 1 Required

Item Description	Manufacturer	Model* "S" or "P"	Software Title & Revision #	Serial No. &/or Lab ID	Date Installed Month/Year
GC/MS					
purge & trap					
Data System					

3. Gas Chromatograph/Mass Spectrometer/Data System for Medium/Low VOA's -- Minimum 1 Required

Item Description	Manufacturer	Model* "S" or "P"	Software Title & Revision #	Serial No. &/or Lab ID	Date Installed Month/Year
GC/MS					
closed system purge & trap					
Data System					

* Designate whether a service agreement is in place or personnel on staff will perform instrument repairs. Indicate with either an "S" or "P" with the instrument model.

CONTRACT DESIGNATED EQUIPMENT SUMMARY (continued)

Laboratory _____ Date _____

4. Gas Chromatograph/Mass Spectrometer/Data System for Semi VOAs -- Minimum 1 Required

Item Description	Manufacturer	Model* "S" or "P"	Software Title & Revision #	Serial No. &/or Lab ID	Date Installed Month/Year
GC/MS					
Data System					

5. Gas Chromatograph/Flame Ionization Detector -- Minimum 1 Required

Item Description	Manufacturer	Model* "S" or "P"	Software Title & Revision #	Serial No. &/or Lab ID	Date Installed Month/Year
GC/FID					
Data System					

6. Gas Chromatograph/Nitrogen Phosphorous Detector -- Minimum 1 Required

Item Description	Manufacturer	Model* "S" or "P"	Software Title & Revision #	Serial No. &/or Lab ID	Date Installed Month/Year
GC/NPD					
Data System					

7. Gel Permeation Chromatography System -- Minimum 2 required

Item Description	Manufacturer	Model* "S" or "P"	Software Title & Revision #	Serial No. &/or Lab ID	Date Installed Month/Year
GPC					
GPC					

* Designate whether a service agreement is in place or personnel on staff will perform instrument repairs. Indicate with either an "S" or "P" with the instrument model.

CONTRACT DESIGNATED EQUIPMENT SUMMARY (continued)

Laboratory _____ Date _____

8. Data Back-up System

Item Description	Manufacturer	Model*	Software Title & Revision #	Serial No. &/or Lab ID	Date Installed Month/Year
Data Back-up System					

* Designate whether a service agreement is in place or personnel on staff will perform instrument repairs. Indicate with either an "S" or "P" with the instrument model.

B. MINIMUM REQUIRED BACK-UP LABORATORY EQUIPMENT INVENTORY

The items of back-up laboratory equipment listed below are the minimum required for contract compliance.

Back-up Items Description	Manufacturer	Model* "S" or "P"	Software Title & Revision #	Serial No. &/or Lab ID	Date Installed Month/Year
GC/MS					
purge & trap					
GC					
ECD					
ECD					
FID					
NPD					

* Designate whether a service agreement is in place or personnel on staff will perform instrument repairs. Indicate with either an "S" or "P" with the instrument model.

C. Describe the laboratory's plan to perform volatile in soil analysis when the prime closed system purge & trap is not in service: _____

CONTRACT DESIGNATED EQUIPMENT SUMMARY (continued)

Laboratory _____ Date _____

D. OTHER INORGANIC LABORATORY EQUIPMENT

Item Description	Manufacturer	Model* "S" or "P"	Date Installed Month/Year

* Designate whether a service agreement is in place or personnel on staff will perform instrument repairs. Indicate with either an "S" or "P" with the instrument model.

ATTACHMENT G-3
DESIGNATED PERSONNEL QUALIFICATION SUMMARY

Laboratory _____ Date _____

Offeror shall summarize the education and experience of all key personnel and other staff who will work on the resultant contract in the following format. **The minimum qualifications for these positions are specified in Section J, Attachment B.**

Position	Duties	Name	Education (Type of degree, Institution, Year of degree)	Experience (Number of years/postion title)
Laboratory Manager*				
Project Manager*				
Quality Assurance Officer*				
GC/MS Laboratory Supervisor*				
GC/MS Interpretation Specialist*				
GC Laboratory Supervisor*				
Pesticide/PCB Analysis Expert*				
Sample Preparation Laboratory Supervisor*				
Preparation Laboratory Chemist				
Preparation Laboratory Chemist				
Laboratory Information Systems Manager				
Sample Custodian				

* Key pesonnel positions.

ATTACHMENT G-3
DESIGNATED PERSONNEL QUALIFICATION SUMMARY(continued)

Laboratory _____ Date _____

Position	Duties	Name	Education (Type of degree, Institution, Year of degree)	Experience (Number of years/position title)
Backup Sample Custodian				
Document Control Officer				
Backup Document Control Officer				
GC/MS Operator				
GC/MS Operator				
GC/MS Operator				
GC Operator				
GC Operator				
GC Operator				

* Key personnel positions.

ATTACHMENT G-4
Pre-Award Performance Evaluation Sample (PES)
OREAP-01.0 PA-PES Score Sheet

Note: Maximum # of points per section = 100.
PA-PES Scoring Algorithm deducts points from 100.
Minimum passing PA-PES Score = 75.

Section I - Pre-Award Performance Evaluation Sample (PA-PES)

The Prediction Interval (PI) for each analyte will be statistically calculated using the Biweight Method using **only** the bidders analytical data. The PI will be set using the 90% confidence window with the following two conditions:

- If a TCL or non-TCL compound added to the sample is not identified by 40% or more of the bidders, then that compound is not used in the PA-PES scoring.
- If TCL compound not added to the sample (a TCL contaminant) is identified by 40% or more bidders, then that compound is not to be used in the PA-PES scoring.

The government reserves the right to change the statistical calculation method of any PI or to not utilized a PI (i.e., drop an analyte from scoring) due to unexpected complications with the PA-PES data set. The bidder's analytical PA-PES results will be evaluated and scored using the following scoring algorithm:

$$\text{PA-PES Score} = 100 - ((125 * \{2A+B+C\} / T) + (2.2 * D))$$

where:

- A = Number of TCL compounds added to the sample which the bidder did not identify.
- B = Number of TCL compounds added to the sample which the bidder identified outside the action limits.
- C = Number of TCL contaminants (compounds not added to the sample) which the bidder quantitated above the CRQL.
- D = Number of non-TCL compounds added to the sample which the bidder did not identify.
- T = Total number of TCL compounds added to the sample which were used for scoring (excludes TCLS with NU as Limits).

ATTACHMENT G-5
Performance Evaluation Sample (PES)
Data Package
Score Sheet

Laboratory: _____ Date: _____

Final Score (pts.): _____

Maximum Number of Points Possible = 382 pts.

*Acceptable Score = \geq 269 pts.

Sections I, II A, III A, IV A, VA - An acceptable score requires that 50% of the total points for these sections are obtained.

Sections II B, II C, III B, III C, IV B, V B, V C - An acceptable score requires that 80% of the total points for these sections are obtained.

I. General Package Deliverables

- _____ 1. Paginated
- _____ 2. Inventory Sheet (Form DC-2)
- _____ 3. SDG Narrative
- _____ 4. Airbill
- _____ 5. Chain-of-Custody Records/Traffic Reports
- _____ 6. Sample Tags
- _____ 7. Sample Log-in Sheet (Lab & Form DC-1)
- _____ 8. Telephone Logs

- _____ Total

II. Volatiles - Aqueous

A. Summary Data

- _____ 9. TCL Results - (Form I VOA-1, VOA-2)
- _____ 10. Tentatively Identified Compounds (Form I VOA-TIC)
- _____ 11. System Monitoring Compound Summary (Form II VOA)
- _____ 12. Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)
- _____ 13. Method Blank Summary (Form IV VOA)
- _____ 14. GC/MS Instrument Performance Check (Form V VOA)
- _____ 15. Initial Calibration Data (Form VI VOA-1, VOA-2)
- _____ 16. Initial Calibration Verification Data (Form VII VOA-1, VOA-2)
- _____ 17. Continuing Calibration Data (Form VIII VOA-1, VOA-2)
- _____ 18. Internal Standard Area and RT Summary (Form IX VOA)

_____ Total

B. Raw Data - For each Standard, QC Sample and Field Sample

- _____ 19. Reconstructed Total Chromatograms (RIC) for each sample
- _____ 20. Raw spectra and background-subtracted mass spectra of target compounds ID'd
- _____ 21. Quantitation Reports
- _____ 22. Mass spectra of all reported TICs with three best library matches
- _____ 23. BFB (Bar graph spectrum, mass listing and RIC)
- _____ 24. Blank data (RICs, Quantitation Reports and Mass Spectra)
- _____ 25. Matrix spike data (RICs, Quantitation Reports and Mass Spectra)

_____ Total

C. Quality Control Requirements

- _____ 26. All GC/MS Instrument Performance Check criteria are achieved.
- _____ 27. All Initial Calibration criteria are achieved.
- _____ 28. All Continuing Calibration criteria are achieved.
- _____ 29. All Internal Standard criteria are achieved.
- _____ 30. All System Monitoring Compound criteria are achieved.
- _____ 31. All Matrix Spike/Matrix Spike Duplicate criteria are achieved.
- _____ 32. All Method Blank criteria are achieved.

_____ Total

III. Semivolatile - Aqueous

A. Summary Data

- _____ 33. TCL Results (Form I SV-1, SV-2)
- _____ 34. Tentatively Identified Compounds (Form I SV-TIC)
- _____ 35. Surrogate Percent Recovery Summary (Form II SV)
- _____ 36. Matrix Spike/Matrix Spike Duplicate Summary (Form III SV)
- _____ 37. Method Blank Summary (Form IV SV)
- _____ 38. GC/MS Instrument Performance Check (Form V SV)
- _____ 39. Initial Calibration Data (Form VI SV-1, SV-2)
- _____ 40. Continuing Calibration Data (Form VII SV-1, SV-2)
- _____ 41. Internal Standard Area and RT Summary (Form VIII SV)

_____ Total

III. Semivolatile - Aqueous cont.

B. Raw Data - For each Standard, QC Sample and Field Sample

- _____ 42. Reconstructed Total Ion Chromatograms (RICs)
- _____ 43. Raw spectra and background-subtracted mass spectra of target compounds ID'd
- _____ 44. Quantitation Reports
- _____ 45. Mass spectra of all reported TICs with three best library matches
- _____ 46. GPC chromatograms and other associated GPC data

- _____47. DFTPP (Bar graph spectrum, mass listings and RIC)
- _____48. Blank Data (RICs, Quantitation Reports and Mass Spectra)
- _____49. Matrix spike data (RICs, Quantitation Reports and Mass Spectra)
- _____ Total

C. Quality Control Requirements

- _____50. All GC/MS Instrument Performance Check criteria are achieved.
- _____51. All Initial Calibration criteria are achieved.
- _____52. All Continuing Calibration criteria are achieved.
- _____53. All Internal Standard criteria are achieved.
- _____54. All Surrogate criteria are achieved.
- _____55. All Matrix Spike/Matrix Spike Duplicate criteria are achieved.
- _____56. All Method Blank criteria are achieved.
- _____ Total

IV. Pesticide/Aroclor Data - Aqueous

A. Summary Data

- _____57. TCL Results (Form I Pest)
- _____58. Surrogate Percent Recovery Summary (Form II PEST)
- _____59. MS/MSD Duplicate Summary (Form III PEST)
- _____60. Method Blank Summary (Form IV PEST)
- _____61. Initial Calibration of Single Component Analytes (Form VI PEST -1, and PEST-2)
- _____62. Initial Calibration of Multicomponent Analytes (Form VI PEST-3 and PEST-4)
- _____63. Analyte Resolution Summary (Form VI PEST-5)
- _____64. Performance Evaluation Mixture (Form VI PEST-6)
- _____65. Individual Standard Mixture A (Form VI PEST-7)
- _____66. Individual Standard Mixture B (Form VI PEST-8)
- _____67. Calibration Verification Summary (Form VII PEST-1)
- _____68. Calibration Verification Summary (Form VII PEST-2)
- _____69. Analytical Sequence (Form IX PEST)
- _____70. Florisil Cartridge Check (Form X PEST-1)
- _____71. Pesticide GPC Calibration (Form X PEST-2)
- _____72. Pesticide Identification Summary for Single Component Analytes (Form XI PEST-1)
- _____73. Pesticide Identification Summary for Multicomponent Analytes (Form XI PEST-2)
- _____ Total

IV. Pesticide/Aroclor Data - Aqueous cont.

B. Raw Data - For each Standard, QC Sample and Field Sample

- _____ 74. Chromatograms (Primary column)
- _____ 75. Chromatograms (Secondary column confirmation)
- _____ 76. GC Integration report data system printout
- _____ 77. Manual work sheets
- _____ 78. For pesticides/Aroclors confirmed by GC/MS, copies of raw spectra and copies of background subtracted mass spectra of target compounds.
- _____ 79. Blank data (Chromatograms & Integration reports)
- _____ 80. Matrix Spike/Matrix Spike Duplicate data (Chromatograms & Integration reports)
- _____ 81. GPC Data
- _____ 82. Florisil Data
- _____ 83. Other original documents (e.g. laboratory logbook pages, screening records etc.)
- _____ Total

C. Quality Control Requirements

- _____ 84. All Initial Calibration criteria achieved.
- _____ 85. All Analyte Resolution criteria achieved.
- _____ 86. All Performance Evaluation Mixture criteria achieved.
- _____ 87. All Individual Standard Mixture criteria achieved.
- _____ 88. All Calibration Verification criteria achieved.
- _____ 89. All Analytical Sequence criteria achieved.
- _____ 90. All Florisil Cartridge check criteria achieved.
- _____ 91. All Pesticide GPC calibration criteria achieved.
- _____ 92. All Identification criteria achieved.
- _____ 93. All Surrogate criteria achieved.
- _____ 94. All Matrix Spike/Matrix Spike Duplicate criteria achieved.
- _____ 95. All Method Blank criteria achieved.
- _____ Total

V. Pesticide/Aroclor Data - Soil/Sediment/Solid

A. Summary Data

- _____ 96. TCL Results (Form I Pest)
- _____ 97. Surrogate Percent Recovery Summary (Form II PEST)
- _____ 98. MS/MSD Duplicate Summary (Form III PEST)
- _____ 99. Method Blank Summary (Form IV PEST)
- _____ 100. Initial Calibration of Single Component Analytes (Form VI PEST -1, and PEST-2)
- _____ 101. Initial Calibration of Multicomponent Analytes (Form VI PEST-3 and PEST-4)
- _____ 102. Analyte Resolution Summary (Form VI PEST-5)
- _____ 103. Performance Evaluation Mixture (Form VI PEST-6)
- _____ 104. Individual Standard Mixture A (Form VI PEST-7)
- _____ 105. Individual Standard Mixture B (Form VI PEST-8)
- _____ 106. Calibration Verification Summary (Form VII PEST-1)
- _____ 107. Calibration Verification Summary (Form VII PEST-2)
- _____ 108. Analytical Sequence (Form IX PEST)
- _____ 109. Florisil Cartridge Check (Form X PEST-1)
- _____ 110. Pesticide GPC Calibration (Form X PEST-2)
- _____ 111. Pesticide Identification Summary for Single Component Analytes (Form XI PEST-1)
- _____ 112. Pesticide Identification Summary for Multicomponent Analytes (Form XI PEST-2)
- _____ Total

V. Pesticide/Aroclor Data - Soil/Sediment/Solid cont.

B. Raw Data - For each Standard, QC Sample and Field Sample

- _____ 113. Chromatograms (Primary column)
- _____ 114. Chromatograms (Secondary column confirmation)
- _____ 115. GC Integration report data system printout
- _____ 116. Manual work sheets
- _____ 117. For pesticides/Aroclors confirmed by GC/MS, copies of raw spectra and copies of background subtracted mass spectra of target compounds.
- _____ 118. Blank data (Chromatograms & Integration reports)
- _____ 119. Matrix Spike/Matrix Spike Duplicate data (Chromatograms & Integration reports)
- _____ 120. GPC Data
- _____ 121. Florisil Data
- _____ 122. Other original documents (e.g. laboratory logbook pages, screening records etc.)

- _____ Total

C. Quality Control Requirements

- _____ 123. All Initial Calibration criteria achieved.
- _____ 124. All Analyte Resolution criteria achieved.
- _____ 125. All Performance Evaluation Mixture criteria achieved.
- _____ 126. All Individual Standard Mixture criteria achieved.
- _____ 127. All Calibration Verification criteria achieved.
- _____ 128. All Analytical Sequence criteria achieved.
- _____ 129. All Florisil Cartridge check criteria achieved.
- _____ 130. All Pesticide GPC calibration criteria achieved.
- _____ 131. All Identification criteria achieved.
- _____ 132. All Surrogate criteria achieved.
- _____ 133. All Matrix Spike/Matrix Spike Duplicate criteria achieved.
- _____ 134. All Method Blank criteria achieved.

- _____ Total

ATTACHMENT G-6
INSTRUCTIONS FOR SAMPLE SCENARIO ORAL PRESENTATION

The deliverables for the Labor Hour Pool Scenario shall consist of no more than two pages. Following are the required elements for the two pages:

1. Page One (Typewritten on 8.5" x 11" paper, 10 point character size font, no less than a 3/4" all around margin.)
 - A. An abstract of the offeror's proposed procedures for sample preparation and analysis;
 - B. A description of the QA program;
 - C. A summary of changes which will be made to the REAP deliverable package;
 - D. Summary of the staffing by labor category and number of hours required to complete the project. Offeror should be prepared to justify the proposed hours.
2. Page Two
 - A. Include the QC elements in tabular format. See attached table.
3. The scenario will be provided via facsimile five hours prior to the presentation. The offeror will have four hours to develop the reply. The reply must be submitted via facsimile no later than four hours after receipt of the scenario. EPA will review the reply, Page One and Page Two. One hour after the US EPA receipt of the reply, the offeror will conduct a 45 minute presentation. EPA will caucus for 15 minutes after which there will be a 45 minute question and answer period.
4. Participants

The presentation shall be made by the Program Manager, relevant key personnel, and the Document Control Officer. Any exceptions to this requirement must be approved by the Contracting Officer prior to the presentation.

Quality Control Summary Table

[illegible]

ATTACHMENT H-1
TENTATIVE EVENT SEQUENCE FOR PREAWARD SITE EVALUATION

A. Entrance Briefing

- Purpose of site visit
- Current contract award status
- Tentative agenda

B. Facility Tour and Verification of Procedures

- Sample Receipt, Storage, Log-in, and Tracking
- Sample Preparation
- Sample Analysis
- Data Management
- QA Program

C. EPA Caucus

D. Exit Briefing

- Discuss preliminary findings identified during site evaluation and document reviews
- Discuss corrective action requirements

ATTACHMENT H-2
Pre-Award Organic On-Site Laboratory Evaluation Report

Laboratory: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Telephone: () _____ - _____

Date of Evaluation: ____ / ____ / ____ Solicitation No. _____

Title: **Chemical Analysis of Multi-media; Multi-concentration samples for organic using GM/MS and GC Techniques**

PERSONNEL CONTACTED

Name:

Title:

LABORATORY EVALUATION TEAM

Name:

Title:

Laboratory Evaluation Checklist

Laboratory Name:	Yes	No
I. SAMPLE RECEIPT AND STORAGE AREA		
<u>ITEM</u>		
I.1 Sample Receiving and Storage Facilities		
1. Are the sample shipping containers opened in a fume hood or vented area to prevent possible laboratory contamination?		
2. Are adequate facilities provided for the cold storage of samples and unused samples for 60 days after data submission?		
3. Are samples and extracts signed in and out of a locked refrigerator by the custodian or other designated individual?		
4. Are cooler temperatures measured and recorded in a laboratory notebook?		
5. Does the sample custodian sign the original chain-of-custody (COC)?		
Comments:		
I.2 Cold Storage for Samples (maintained at 4°C ± 2°C)		
1. Is the temperature of the cold storage recorded daily in a logbook?		
2. Are temperature excursions noted and appropriate actions taken when required?		
3. Are corrective action SOP's posted on the cold storage units?		
4. Are volatile samples stored separately from semivolatile, pesticide, PCB and herbicide samples?		
5. Are VOA storage blanks present in the volatile sample storage facility? (One per SDG)		
Comments:		
I.3 SOPs and Record keeping		
1. Is the sample receipt portion of the SOP available to the sample custodian at the sample receipt/storage area?		
2. Are the sample receipt/storage and temperature logbooks completed in a manner consistent with the laboratory's SOP?		
3. Does the sample custodian note the condition of the custody seal in a laboratory notebook?		
Laboratory Name:	Yes	No
4. Does the custodian note the time and physical condition of the sample in a laboratory notebook?		

5. Is there evidence of a secondary review of all documents and logbooks by someone other than the person generating the documents?		
Comments:		
II. SAMPLE PREPARATION AREA When touring the facilities, give special attention to: (a) the overall organization and neatness, (b) the proper maintenance of facilities and instrumentation, © the general adequacy of the facilities to accomplish the required work. <u>ITEM</u>		
II.1 General Facilities		
1. Is the laboratory maintained in a clean and organized manner?		
2. Does the laboratory appear to have adequate work space (6 linear feet of unencumbered bench top per analyst)?		
3. Are laboratory benches made of suitable chemically- resistant materials?		
4. Is there adequate lighting?		
5. Is there adequate ventilation?		
Comments:		
II.2 Laboratory Safety		
1. Is the laboratory safety plan available?		
2. Do chemists, technicians and analysts wear safety glasses and other safety-related equipment?		
3. Are eye wash stations available?		
4. Are chemical spill pillows and spill kits readily available?		
5. Are adequate fire extinguishers, fire blankets and sprinklers available?		
6. Are there signs showing emergency equipment and emergency exits?		
Comments:		
Laboratory Name:	Yes	No
II.3 Contamination Control		
1. Are contamination-free areas provided for trace level analytical work?		
2. Are contamination-free work areas provided for the handling of toxic materials? (Glove box or isolated hood)		
3. Are there an adequate number of exhaust hoods provided to allow contamination-free work with volatile materials?		

4. Is documented organic-free water available for the preparation of standards and blanks?		
5. Are solvent storage cabinets vented or located in such a way as to prevent possible laboratory contamination?		
6. Is the glassware cleaning operation present and meet GLP standards?		
7. Is glassware stored clean uncontaminated areas?		
Comments:		
II.4 Reagent Control	Yes	No
1. Are analytical reagents dated upon receipt and used on a first-, first- out basis? (GLP)		
2. Is the purity and reactivity of the analytical reagents verified before use? (Confirm by reagent blank data)		
Comments:		
II.5 Balances		
1. Is the analytical balance located away from drafts and areas subject to rapid temperature changes?		
2. Have all balances been calibrated and checked within one year by a certified technician?		
3. Are all balances checked daily or before each weighing session with the appropriate range of weights and the results recorded a permanent notebook?		
4. Are the routine weights calibrated against class S weights at least once per month and the results recorded a permanent notebook?		
Comments:		
Laboratory Name:	Yes	No
II.6 Sample Extract Storage		
1. Is the temperature of the extract cold storage properly monitored and recorded?		
2. Are sample extracts stored separately from standards and samples?		
3. Does there appear to be sufficient storage space to keep extracts for the period of time specified the SOW? (365 days)		
4. Is a logbook available listing extracts and their location?		
Comments:		

II.7 Extraction Apparatus		
1. Are appropriate sonicator tips or horns available and free of erosion? (3/4 inch and 1/8 inch)		
2. Does the laboratory have sufficient continuous liquid/liquid extractors to meet the expected workload?		
Comments:		
II.8 Gel Permeation Chromatograph (GPC)		
1. Does the laboratory keep GPC injection and maintenance logbooks?		
2. Do the logbooks indicate that appropriate corrective actions were taken when the calibration does not meet contract requirements?		
Comments:		
II.9 SOPs and Recordkeeping		
1. Is the appropriate portion of the SOP available to the analyst at the sample preparation area?		
2. Is the SOP for glassware cleaning posted at the cleaning station?		
3. Do the analysts record bench data a neat and accurate manner?		
4. Do the analysts record lot numbers of solvents, spiking solutions, and florisil on the bench sheets?		
5. Are the sample preparation and temperature logbooks completed a manner consistent with the laboratory's SOP?		
6. Is there evidence of a secondary review of all documents and logbooks by someone other than the person generating the documents?		
Laboratory Name:	Yes	No
Comments:		
III. STANDARDS PREPARATION AND STORAGE		
ITEM		
III.1 Standards Storage		
1. Are all organic standards stored so they are protected from exposure to light?		
2. Are Standards stored at the correct temperature?		
a. Volatile at -10 to -20°C		
b. Semivolatile at 2 to 6°C		
c. Pesticide/PCB at 2 to 6°C		
d. Herbicide at 2 to 6°C		

3. Is the temperature of the standards cold storage properly monitored and recorded?		
4. Are volatile standards stored separately from semivolatile, Pesticide, PCB and herbicide standards?		
5. Are volatile standards stored separately from volatile samples?		
Comments:		
III.2 Standards Preparation		
1. Are reagent grade or higher purity chemicals used to prepare standards?		
2. Are reference materials properly labeled with concentrations, date of preparation, and the identity of the person preparing the standard and/or is a traceable reference code number used?		
3. Are fresh analytical stock standard solutions prepared at a frequency consistent with IFB requirements for:		
a. Volatile--gases/reactive compounds - 2 months; others/non-reactive - 6 months		
b. Semivolatiles - 12 months		
c. Pesticides - 6 months		
d. Herbicides - 12 months		
Laboratory Name:	Yes	No
Comments:		
III.3 Standards Recordkeeping		
1. Are spiking/calibration standards preparation and tracking logbooks maintained for:		
a. Volatile		
b. Semivolatile		
c. Pesticide		
d. Herbicide		
2. Are lot numbers and sources of stock solutions and reagents recorded?		
3. Are there SOPs on standard preparation available to the chemist the preparation area?		
4. Is there evidence of a secondary review of all standards preparation logbooks by someone other than the person generating the records?		
Comments:		
III.4 Standards Certification		

1. Does the laboratory purchase commercially-prepared standard mixes?		
2. Is appropriate documentation (manufacturer's "Certificate of Analysis") available for each lot of purchased standards use?		
a. Volatile		
b. Semivolatiles		
c. Pesticides		
d. Herbicides		
Comments:		
IV. SAMPLE ANALYSIS INSTRUMENTATION-GC/MS AREA		
ITEM		
IV.1 GC/MS Operation and Maintenance		
1. Are manufacturer's operating manuals readily available to the operator?		
2. Does the laboratory purchase a service contract for instruments?		
Laboratory Name:	Yes	No
3. Are extensive -house replacement parts available for routine and non-routine maintenance (GC/MS and GC spares, filaments, GC columns, traps, etc.)?		
4. Does the laboratory perform regular preventive maintenance on the instruments used?		
5. Is a permanent service record for each instrument maintained a logbook?		
6. Are the instruments properly vented or are appropriate traps place?		
7. Does the laboratory use the May 1992 release or later of the NIST/EPA/NIH or WILEY (1991 release or later) mass spectral library for library searching?		
Comments:		
IV.2 Magnetic Tape Storage of GC/MS Electronic Data		
1. Is raw data, including quantitation output files and libraries, archived on magnetic tape?		
2. Is a log of the contents of the raw data magnetic tapes available?		
Comments:		
IV.3 GC/MS Analysis		
1. Does the laboratory have the necessary equipment to perform heated purge and trap analysis on low level soil samples?		

2. Are VOA Samples stored and analyzed in an area free from solvents and isolated from the extraction area?		
3. Does the laboratory have instrumentation dedicated for volatile analysis?		
Comments:		
IV.4 SOPs and Recordkeeping- GC/MS Area		
1. Can the instrument operator demonstrate, using the instrument run log, that the following corrective actions have been taken when needed?		
a. Reanalyses when internal standard areas are out.		
b. Dilution when the calibration range is exceeded		
c. Blanks when the previous sample showed saturation		
Laboratory Name:	Yes	No
2. Is the appropriate portion of the SOP available to the analyst at the GC/MS analysis area?		
3. Do the analysts accurately record all GC/MS injections in a bound or serially numbered logbook?		
4. Are the GC/MS injection logbooks completed in a manner consistent with the laboratory's SOP?		
5. Is there evidence of a secondary review of all documents and logbooks by someone other than the person generating the documents?		
Comments:		
IV.5 GC Operation and Maintenance		
1. Are manufacturer's operating manuals readily available to the operator?		
2. Does the laboratory purchase a service contract for instruments used?		
3. Are extensive in-house replacement parts available for routine and non-routine maintenance (Spare columns, injector and detector spares, syringes, etc.)?		
4. Does the laboratory perform regular preventive maintenance on the instruments used?		
5. Is a permanent service record maintained in a logbook?		
6. Are the instruments properly vented or are appropriate traps in place?		
Comments:		
IV.6 SOPs and Recordkeeping GC/EC Area		
1. Is the appropriate portion of the SOP available to the analyst at the analysis area?		
2. Do the analysts record all GC injections in a bound or serially numbered logbook?		

3. Are the GC injection logbooks completed a manner consistent with the laboratory's SOP?		
4. Is there evidence of a secondary review of all documents and logbooks by someone other than the person generating the documents?		
V. DATA HANDLING AND REVIEW <u>ITEM</u>		
1. Are data calculations spot-checked by a second person?		
2. Do records indicate that appropriate corrective action has been taken when analytical results fail to meet QC criteria?		
3. Do supervisory personnel review the data and QC results prior to submission?		
Laboratory Name:	Yes	No
COMMENTS:		
VI. DATA MANAGEMENT <u>ITEM</u>		
1. Are data and file access User ID or file password protected?		
2. Are deliverables checked by the system for completeness and accuracy?		
3. Is an estimated data entry error rate determined and recorded?		
4. Are the "actual" hardcopy deliverables inspected by the internal QC process?		
5. Are resubmitted deliverables inspected prior to submission?		
6. When changes to deliverables are required, are the changes properly documented? (rationale, review, initials)		
7. Are user manuals and operations/systems manuals available?		
8. Is a written software test and acceptance plan available for installation of system changes?		
Comments:		
VII. QUALITY ASSURANCE INTERNAL INSPECTIONS <u>ITEM</u>		
VII.1 Records of Internal Quality Assurance Audits		
1. Internal audit sample results.		
2. Extraction personnel - initial determination of extraction recoveries.		
3. Records of personnel training and experience.		
4. Documentation of method sensitivity.		

Comments:		
VII.2 What is the frequency and type of internal audits? (Random, regularly scheduled, spot check) (Compare the dates specified the laboratory's SOP and QAP with the dates of actual occurrence)		
Laboratory Name:	Yes	No
VII.3 Can the laboratory demonstrate, through QA records and reports, the sequence of problem identification, corrective action, and resumption of analysis?		
Comments:		
VII.4 Does the Quality Assurance Officer maintain records of laboratory performance, such as precision and accuracy charts of laboratory spikes?		
Comments:		
VIII. QUALITY ASSURANCE PLAN <u>ITEM</u>		
VIII.1 Is a written QA Plan (QAP) available?		
VIII.2 Does the QAP contain the following sections?		
1. Organization and Policy?		
2. Facilities and Equipment?		
3. Document Control?		
4. Analytical Methodology?		
5. Data Generation?		
6. Quality Control?		
7. Quality Assurance?		
Comments:		
IX. LABORATORY STANDARD OPERATING PROCEDURES (SOPs) <u>ITEM</u>		
IX.1 Is a set of SOPs available?		
IX.2 Do the SOPs adequately address the following topics?		
1. Evidentiary SOPs.		

2. Sample receipt and storage.		
3. Sample preparation.		
4. Glassware cleaning.		
Laboratory Name:	Yes	No
5. Calibration (Balances).		
6. Analytical procedures (for each analytical system).		
7. Maintenance activities (for each analytical system).		
8. Analytical Standards.		
9. Data reduction procedures.		
10. Documentation policy/procedures.		
11. Data validation/self-inspection system.		
12. Data management and handling.		
Comments:		
X. ORGANIZATIONAL AND PERSONNEL SUMMARY (See also Key Personnel List) <u>ITEM</u>		
X.1 Does the Laboratory Quality Assurance Officer report to senior management levels?		
X.2 Do personnel assigned to this project have the appropriate educational background to success fully accomplish the objectives of the program?		
X.3 Is the organization adequately staffed to meet project commitments a timely manner?		
X.4 Were all key personnel available? (List those not available the comments section.)		
Comments:		
XI. LABORATORY CAPACITY <u>ITEM</u>		
XI.1 Does the laboratory have the minimum analytical instrumentation required for the contract?		
XI.2 Does the laboratory have minimum technical and administrative personnel required for the contract?		
XI.3 Does the laboratory have an adequate sample and data tracking system to handle the number of analyses contracted?		
Laboratory Name:	Yes	No

Comments:		
XII. SUMMARY		
<u>ITEM</u>		
XII.1 Do responses to the evaluator indicate that project and supervisory personnel are aware of QA/QC and its importance to the project?		
XII.2 Do project and supervisory personnel place a positive emphasis on QA/QC?		
XII.3 Have responses with respect to the QA/QC aspects of the project been open and direct?		
Comments:		